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Reply to Office Action of September 22, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Cancel non-elected claims 1 - 16 without prejudice.

Claim 17 (currently amended): A system for enhancing a color image as perceived by a human viewer, said image being composed of a plurality of superimposed dot-patterns upon a portion of a movable curved surface having two orthogonal spatial dimensions and having curvature in only one of said dimensions, the direction of motion of said surface being in said one of said dimensions, each one of said patterns being monochromatic and different in color from color of each other of said patterns, said ~~method~~ system comprising:

means for intentionally misregistering the dots of at least one of said dot patterns with respect to the dots of at least one of said other of said patterns in directions ~~only both~~ parallel to and perpendicular to said direction of motion to obtain a ~~pattern~~ misregistration pattern;

wherein said dot patterns are comprised of a plurality of dots being randomly spaced on said surface in said only one of said dimensions and being regularly spaced on said surface along the other of said dimensions; and

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means for controlling said ~~pattern~~ misregistration pattern to obtain a particular misregistration having the property of said enhancing said color image while said particular misregistration is not perceptible to said viewer.

Claim 18 (canceled).

Claim 19 (canceled).

Claim 20(original). The system of claim 17 and wherein said enhancing said color image includes at least enhancing color uniformity of said image.

Claim 21 (original). The system of claim 17 and wherein said curved surface is elliptical.

Claim 22 (original). The system of claim 17 and wherein said curved surface is cylindrical.

Claim 23 (currently amended). The system of claim ~~18~~ 17 and wherein said dots are positioned on said surface at first spatial frequencies too high to be perceived as individual dots by an unaided eye of said human viewer, and wherein said ~~pattern~~ misregistration pattern forms a new pattern having other spatial frequencies likewise too high to be perceived as individual dots by an unaided eye of said human viewer.

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Cancel non-elected claims 24 - 39 without
prejudice.

Claim 40 (currently amended). Apparatus for enhancing a color image as perceived by a human viewer, said image being composed of a plurality of superimposed dot-patterns upon a portion of a movable curved surface having two orthogonal spatial dimensions and having curvature in only one of said dimensions, the direction of motion of said surface being in said one of said dimensions, each one of said patterns being monochromatic and different in color from color of each other of said patterns, said apparatus comprising:

apparatus for intentionally misregistering the dots of at least one of said dot patterns with respect to the dots of at least one of said other of said patterns in directions ~~only~~ both parallel to and perpendicular to said direction of motion to obtain a ~~pattern~~ misregistration pattern;

wherein said dot patterns are comprised of a plurality of dots being randomly spaced on said surface in said only one of said dimensions and being regularly spaced on said surface along the other of said dimensions; and,

control apparatus for controlling said ~~pattern~~ misregistration pattern to obtain a particular misregistration having the property of said enhancing

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said color image while said particular misregistration is not perceptible to said viewer.

Claim 41 (canceled).

Claim 42 (canceled).

Claim 43 (original). The apparatus of claim 40 and wherein said enhancing said color image includes at least enhancing color uniformity of said image.

Claim 44 (original). The apparatus of claim 40 and wherein said curved surface is elliptical.

Claim 45 (original). The apparatus of claim 40 and wherein said curved surface is cylindrical.

Claim 46 (currently amended). The apparatus of claim ~~41~~ 40 and wherein said dots are positioned on said surface at first spatial frequencies too high to be perceived as individual dots by an unaided eye of said human viewer, and wherein said ~~pattern~~ misregistration pattern forms a new pattern having other spatial frequencies likewise too high to be perceived as individual dots by an unaided eye of said human viewer.

Cancel non-elected claims 47 - 62 without prejudice.

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Claim 63 (currently amended). In a computer-controlled system for enhancing a color image as perceived by a human viewer, said image being composed of a plurality of superimposed dot-patterns upon a portion of a movable curved surface having two orthogonal spatial dimensions and having curvature in only one of said dimensions, the direction of motion of said surface being in said one of said dimensions, each one of said patterns being monochromatic and different in color from color of each other of said patterns, said surface moving in a first direction parallel to said surface, a computer program product for use in said system, said computer program product including a computer usable medium having computer readable program code thereon, said computer readable program code comprising:

program code for intentionally misregistering the dots of at least one of said dot patterns with respect to the dots of at least one of said other of said patterns in directions ~~only~~ both parallel to and perpendicular to said direction of motion to obtain a ~~pattern~~ misregistration pattern;

wherein said dot patterns are comprised of a plurality of dots being randomly spaced on said surface in said only one of said dimensions and being regularly spaced on said surface along the other of said dimensions; and,

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program code for controlling said ~~pattern~~
misregistration pattern to obtain a particular
misregistration having the property of said enhancing
said color image while said particular misregistration
is not perceptible to said viewer.

Claim 64 (canceled).

Claim 65 (canceled).

Claim 66 (original). The computer program product
of claim 63 and wherein said enhancing said color image
includes at least enhancing color uniformity of said
image.

Claim 67 (original). The computer program product
of claim 63 and wherein said curved surface is
elliptical.

Claim 68 (original). The computer program product
of claim 63 and wherein said curved surface is
cylindrical.

Claim 69 (currently amended). The computer program
product of claim ~~64~~ 63 and wherein said dots are
positioned on said surface at first spatial frequencies
too high to be perceived as individual dots by an
unaided eye of said human viewer, and wherein said

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~~pattern~~ misregistration pattern forms a new pattern having other spatial frequencies likewise too high to be perceived as individual dots by an unaided eye of said human viewer.

Cancel non-elected claims 70 - 85 without prejudice.

Claim 86 (currently amended). A method for enhancing a color image as perceived by a human viewer, said image being composed of a plurality of superimposed dot-patterns upon a portion of a movable curved surface having two orthogonal spatial dimensions and having curvature in only one of said dimensions, the direction of motion of said surface being in said one of said dimensions, each one of said patterns being monochromatic and different in color from color of each other of said patterns, said method comprising:

intentionally misregistering at least the dots of one of said dot patterns with respect to the dots of at least one of said other of said patterns in directions ~~only~~ both parallel to and perpendicular to said direction of motion to obtain a ~~pattern~~ misregistration pattern;

wherein said dot patterns are comprised of a plurality of dots being randomly spaced on said surface in said only one of said dimensions and being regularly

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spaced on said surface along the other of said dimensions; and,

controlling said ~~pattern~~ misregistration pattern to obtain a particular misregistration having the property of said enhancing said color image while said particular misregistration is not perceptible to said viewer.

Claim 87 (canceled).

Claim 88 (canceled).

Claim 89 (original). The method of claim 86 and wherein said enhancing said color image includes at least enhancing color uniformity of said image.

Claim 90 (original). The method of claim 86 and wherein said curved surface is elliptical.

Claim 91 (original). The method of claim 86 and wherein said curved surface is cylindrical.

Claim 92 (currently amended). The method of claim ~~87~~ 86 and wherein said dots are positioned on said surface at first spatial frequencies too high to be perceived as individual dots by an unaided eye of said human viewer, and wherein said ~~pattern~~ misregistration pattern forms a new pattern having other spatial

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frequencies likewise too high to be perceived as individual dots by an unaided eye of said human viewer.

Add new claims 93 - 101 as follows:

Claim 93 (new). A system for enhancing a color image as perceived by a human viewer, said image being composed of a plurality of superimposed dot-patterns upon a portion of a movable curved surface having two orthogonal spatial dimensions and having curvature in only one of said dimensions, the direction of motion of said surface being in said one of said dimensions, each one of said patterns being monochromatic and different in color from color of each other of said patterns, said system comprising:

a linear array of printing elements, each one of said printing elements adapted to produce a dot of a color onto said curved surface, said linear array of printing elements extending across substantially the entire width of said curved surface, the width of said curved surface being the dimension perpendicular to the direction of travel;

means for intentionally misregistering the dots of at least one of said dot patterns with respect to the dots of at least one of said other of said patterns in directions both parallel to and perpendicular to said direction of motion to obtain a misregistration pattern; and

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means for controlling said misregistration pattern to obtain a particular misregistration having the property of said enhancing said color image while said particular misregistration is not perceptible to said viewer.

Claim 94 (new). The system of Claim 93 wherein said dot patterns are comprised of a plurality of dots being randomly spaced on said surface in said only one of said dimensions and being regularly spaced on said surface along the other of said dimensions.

Claim 95 (new). The system of Claim 93 wherein said dots are positioned on said surface at first spatial frequencies too high to be perceived as individual dots by an unaided eye of said human viewer, and wherein said misregistration pattern forms a new pattern having other spatial frequencies likewise too high to be perceived as individual dots by an unaided eye of said human viewer.

Claim 96 (new). Apparatus for enhancing a color image as perceived by a human viewer, said image being composed of a plurality of superimposed dot-patterns upon a portion of a movable curved surface having two orthogonal spatial dimensions and having curvature in only one of said dimensions, the direction of motion of said surface being in said one of said dimensions, each one of said patterns being monochromatic and different

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in color from color of each other of said patterns, said apparatus comprising:

a linear array of printing elements, each one of said printing elements adapted to produce a dot of a color onto said curved surface, said linear array of printing elements extending across substantially the entire width of said curved surface, the width of said curved surface being the dimension perpendicular to the direction of travel;

apparatus for intentionally misregistering the dots of at least one of said dot patterns with respect to the dots of at least one of said other of said patterns in directions both parallel to and perpendicular to said direction of motion to obtain a misregistration pattern; and

control apparatus for controlling said misregistration pattern to obtain a particular misregistration having the property of said enhancing said color image while said particular misregistration is not perceptible to said viewer.

Claim 97 (new). The apparatus of Claim 96 wherein said dot patterns are comprised of a plurality of dots being randomly spaced on said surface in said only one of said dimensions and being regularly spaced on said surface along the other of said dimensions.

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Claim 98 (new). The apparatus of Claim 96 wherein said dots are positioned on said surface at first spatial frequencies too high to be perceived as individual dots by an unaided eye of said human viewer, and wherein said misregistration pattern forms a new pattern having other spatial frequencies likewise too high to be perceived as individual dots by an unaided eye of said human viewer.

Claim 99 (new). A method for enhancing a color image as perceived by a human viewer, said image being composed of a plurality of superimposed dot-patterns upon a portion of a movable curved surface having two orthogonal spatial dimensions and having curvature in only one of said dimensions, the direction of motion of said surface being in said one of said dimensions, each one of said patterns being monochromatic and different in color from color of each other of said patterns, said method comprising:

forming said dot patterns with a linear array of printing elements, each one of said printing elements adapted to produce a dot of a color onto said curved surface, said linear array of printing elements extending across substantially the entire width of said curved surface, the width of said curved surface being the dimension perpendicular to the direction of travel;

intentionally misregistering the dots of at least one of said dot patterns with respect to the dots of at

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least one of said other of said patterns in directions both parallel to and perpendicular to said direction of motion to obtain a misregistration pattern; and

controlling said misregistration pattern to obtain a particular misregistration having the property of said enhancing said color image while said particular misregistration is not perceptible to said viewer.

Claim 100 (new). The method of claim 99 wherein said dot patterns are comprised of a plurality of dots being randomly spaced on said surface in said only one of said dimensions and being regularly spaced on said surface along the other of said dimensions.

Claim 101 (new). The method of Claim 99 wherein said dots are positioned on said surface at first spatial frequencies too high to be perceived as individual dots by an unaided eye of said human viewer, and wherein said misregistration pattern forms a new pattern having other spatial frequencies likewise too high to be perceived as individual dots by an unaided eye of said human viewer.